

DEVELOPMENT STRATEGY
FOR R-121 PROJECT

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report to

REDEVELOPMENT & ^{nwk}HOUSING AUTHORITY
NEWARK, NEW JERSEY _{MSC.}

MARCH 1977



Arthur D Little, Inc.

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FOR
R-121 PROJECT

Report to
Redevelopment & Housing Authority
Newark, New Jersey

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I. INTRODUCTION

In early 1975, Arthur D. Little, Inc., (ADL) was employed by the Redevelopment & Housing Authority of the City of Newark (NRHA). The general objective of ADL's work was to assist NRHA in its efforts to market some 400 acres acquired by the Authority to the Industrial River Urban Renewal Project, New Jersey R-121.

More specifically, ADL was to "devise an overall marketing program for the future implementation of the project including recommendations for management and coordination, promotion, financial assistance and other aspects designed to enhance and expedite its development."

During the course of this study, several aspects became clear. First, Newark and the rest of Northern New Jersey were especially hard hit by the economic recession of the mid-1970's. As a result, the demand for land for new and expanded industrial and commercial activities in the Newark area declined to almost nothing. There was little or no market demand for any such land, especially if it was marginal.

Secondly, and equally fundamental, it became clear that R-121 was not really a "marketable product." That is, even if a strong demand for industrial and commercial space in Newark did exist, the current deficiencies of R-121 were such that it could not be regarded as competitive with other prime industrial and commercial land available in other nearby locations in Northern New Jersey.

Therefore, the assigned task of developing a "Market Strategy" for R-121 was clearly premature. The more appropriate task became one of determining what had to be done to make R-121 a "marketable product." It is to this "pre-marketing" effort that most of the following report is directed.

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

1. There is a vital need for increasing employment levels in Newark where in recent years unemployment has been at a higher rate than the average of New Jersey, an industrial state which has been especially hard-hit by the general economic recession. At times, unemployment in Newark has ranged up to 20%.
2. There is not much other vacant land in Newark which is zoned for industry and is suitable for manufacturing, processing and heavy commercial activities, and so N.J. R-121 represents an important asset for future industrial development. It can fulfill a need for expansion space for activities currently in the area and elsewhere in Newark, as well as for new industrial and heavy commercial operations which may be attracted to Newark.
3. R-121 has obvious locational advantages for industrial development. Among them are access to the New York City metropolitan area, proximity to Port Newark and the International Airport, two nearby interchanges of the New Jersey Turnpike, and service by several railroad lines. As a general location for industry, the combination of these attributes makes R-121 compare favorably with any in the metropolitan area.
4. Despite these locational advantages, it is a fact that little development activity has occurred within the R-121 Project area since its designation as an urban renewal area in the mid-1960's. Only one major activity has been attracted to the area. Ideal Toy, a warehousing and assembly operation, located there in 1967.
5. A major reason for the lack of development activity in R-121, a portion of the Jersey Meadowlands, is the bad soil conditions and the attendant very high costs to make the ground suitable for construction. Neither developers nor industrial or commercial users have been willing to incur these high costs, especially when there is other, less costly industrial/heavy commercial land in the Northern New Jersey region.
6. Other deficiencies and important deterrents to development within R-121 are an inadequate infrastructure (i.e., streets, utilities and storm sewers), selected local access problems, Newark's image, and the deplorable physical appearance of the area. Again, many other sites in the region which can be considered competition offer more attractive alternatives.

7. Past efforts at marketing land in R-121 have been minimal and relatively ineffective, due in large part to the inability of assuring potential developers and/or users that the bad soil conditions would be ameliorated without excessive costs to the purchaser. Coupled with the other deficiencies of the area, the high cost of stabilizing the soil has made property in R-121 in the past essentially "non-marketable."
8. To make R-121 marketable and competitive with other land currently available in industrial parks and industrially-zoned areas in nearby communities, will require major efforts on Newark's part: (a) to clean up the trash and other eyesores, (b) to improve the deficiencies in the infrastructure, and (c) to undertake soil stabilization (i.e., piling or surcharging).
9. The costs associated with preparing the land for development and construction, and otherwise making the area desirable for industry, could run as high as \$75-100 million if everything were done to make R-121 attractive to industry (i.e., better access, infrastructure improvements, and piling). Such high costs are probably beyond the means of the City of Newark. Therefore significant financial assistance will be required if the area is to be upgraded to meet modern industrial standards. State funds for such assistance are also limited and so Federal funds from agencies such as HUD and EDA appear to be the most likely source.
10. To date, there is little visible evidence in R-121 to show that Newark has made an effort to follow the important recommendation of a 1965 Arthur D. Little report, namely, "In order to maximize the benefits of the urban renewal program, every effort should be made to demonstrate that the environment of the Project area can be made physically useful and attractive through good planning, landscape design, a high level of municipal services, and effective land use controls."

8. RECOMMENDATIONS

1. If Newark is to redevelop R-121 as a viable and competitive industrial and heavy commercial area, the agencies concerned should make an explicit commitment to work together in a concerted effort to do so. The active participation of the Mayor's Office and the City agencies is critical, coupled with the implementation efforts of the "sister" agencies of the Newark Economic Development Corporation (NEDC) and the Housing & Redevelopment Authority. As the local public agency concerned with urban renewal, and the "landlord" of some 400 acres in R-121, the Authority has the overall responsibility, but it must have the active support of the other agencies. If R-121 is to be developed at a faster pace than in the past, the project must be considered a very high priority item in Newark's economic development efforts.

2. An overall development strategy for R-121 should be adopted and endorsed by the agencies involved. The key elements of such a strategy should be:
 - Make the area physically useful and attractive.
 - Provide sites which can be built upon without excessive preparation costs.
 - Extend financial assistance through new programs as well as the existing Fox-Lance tax abatement provisions.
 - Implement a marketing strategy specifically aimed at attracting industrial and heavy commercial firms to R-121.
3. Immediate efforts should be undertaken to clean up the entire R-121 area. The trash and other accumulated debris currently broadcasts to outsiders Newark's indifference to making the area attractive to existing industry as well as to potential new industrial and other occupants of the area. As little as \$50,000-100,000 would go a long way in hauling off trash, sweeping the streets, levelling dirt piles and the like. Such funds should be available in the City's operating or public works budgets; if not, they might be included in a Federal block grant program or another appropriation.
4. Concurrently, the City should embark upon an enforcement program to require compliance with existing regulations on building and zoning code violations, preventing future dumping, insuring public health and enhancing public safety in the area. Such an enforcement program would be further evidence of the City's concern and desire to upgrade the R-121 area.
5. The City should undertake a public works program aimed at correcting the infrastructure deficiencies within R-121. These improvements will entail bringing up to modern industrial standards the roads, the public utilities, sewers (domestic and storm), and flood control. The City's engineering consultant has estimated the cost for such improvements at \$25 million, plus an estimated \$5 million, for bettering the access to R-121 from the highways and the rest of the City. While it is not critical that such funds be appropriated and expended all at once, they should be programmed over a reasonable time, say the next 1-3 years. Again, if such expenditures for capital works improvements are deemed beyond the City's capabilities, Federal funds can be sought; EPA has funds for sewer and flood control improvements and EDA provides funds through its Title IX Public Works grants.
6. A keystone to a development strategy for R-121, in addition to the actions cited above, is to make sites available at reasonable costs

which can be built upon. Therefore, the City should seek from HUD, EDA or possibly a combination of the two, a firm commitment of up to \$45 million to pile or otherwise stabilize the soil of the sites under the control of the Authority.

7. An agreement should be reached with the Federal funding agency(ies) that (a) the \$45 million is an upper limit, at 1976 costs, for piling an average of 50% of the 400 acres controlled by the Authority; (b) some parcels may be sold with a lessor subsidy, or none, if a purchaser is found who will take the land merely graded or even "as is;" and (c) funds for each "project" or parcel transaction will become available quickly upon submission of a relatively simple cost/benefit justification. If the entire \$45 million is not to be allocated and spent on a one-shot, overall basis (i.e., in anticipation of future sales), it is imperative from a marketing standpoint that the funds can be drawn upon in order to induce the sale of particular property.
8. As another device to enhance its competitive position, the City should encourage the use of the tax abatement provisions available under the Fox-Lance Act. In addition, the City should support the enactment of other enabling legislation to promote economic development, such as the ability to provide financial assistance through guaranteeing interest payments on bonds.
9. As the agency charged with Newark's economic development, NEDC should be given the responsibility for implementing a marketing program for R-121. If the steps outlined in the above Recommendations are carried out, NEDC will have a "product" which is marketable and land can be made available in R-121 which is reasonably competitive with industrial land in other nearby communities.
10. The specifics of a marketing program which should be carried out by NEDC, complemented by the Authority and other City agencies, are as follows:
 - Publicize through press releases and articles in industrial development journals that action is being taken to permit offering land in R-121 on a basis which is comparable and competitive with other Northern New Jersey industrial real estate.
 - Conduct a mail campaign with literature (e.g., letter and a brochure) aimed at companies, in industries identified later in this report, whose locational needs are especially applicable to R-121's attributes.
 - Follow-up with telephone calls and, where appropriate, with visits to real estate and facilities planning managers of companies which evidence interest in Newark and R-121.

- Continue to maintain close liaison with the Public Service Electric & Gas Company and with the Port Authority of New York & New Jersey, two organizations which have both an interest and a promotional capability.
11. The activity of the Authority in the future should be directed first to exerting all the influence it can upon the City (Mayor's Office and the various departments) to fulfill the City's existing obligations in the R-121 area, both as an urban renewal area and a location of currently operating companies. Second, the Authority should prepare the necessary applications for obtaining Federal funds to underwrite the soil stabilization costs. Third, the Authority should maintain a posture of flexibility in future actions. For example, it is not necessary to acquire additional properties; but, if a potential purchaser comes along who seeks a larger and/or differently shaped parcel, the Authority should accommodate him.
 12. In summary, it is up to the City of Newark to determine if it wishes to compete with other Northern New Jersey industrial areas by upgrading R-121 to modern industrial standards. If so, we believe that the recommendations outlined above should be implemented as the best way to do so.

III. BACKGROUND

A. THE R-121 PROJECT

The so-called Industrial River Urban Renewal Project N.J. R-121 is a small, 1500-acre portion of the New Jersey Meadowlands which extends roughly from Hackensack to Newark and covers some 30,000 acres. The Meadowlands are characterized by swamps, dumps, scattered and limited development, and crisscrossing highway and rail transportation arteries. In past years, portions of R-121 have been developed by a mixed use of mostly heavy industrial and commercial activities such as chemical and petrochemical processing, truck depots, distribution warehouses, small manufacturing, and an outdoor movie theatre. However, much of the R-121 area is bad to marginal for any kind of construction or development, and much of that which has been constructed and developed in the past was and is in deteriorated condition.

As a result, in 1967 the Newark Housing Authority contracted with the Federal Urban Renewal Administration to undertake a project with Federal funds to redevelop the area. In 1975, the Authority (now the Redevelopment and Housing Authority of Newark) contracted with Arthur D. Little, Inc., (ADL) to conduct a study aimed at developing marketing strategies for the disposal of some 400-plus acres, comprised of many individual parcels of the total 1500 acres. These parcels had been acquired under the urban renewal process by the Housing Authority.

B. EARLIER STUDIES

As noted above, the New Jersey Meadowlands have been the subject of numerous studies and reports. Since Newark's R-121 project was designated an urban renewal area in the early 1960's, several significant studies have been undertaken by consulting firms.

Each of these firms, including ADL in 1965, have suggested that the area has considerable promise for successful industrial development. Excerpts from the several reports of these consultants which show an optimistic outlook follow:

Louis Schlesinger Company 1964

The suggested land use plan of the Housing Authority of the City of Newark dated April 27, 1964, we believe, covers the needs of the area satisfactorily.

To establish a timetable for the disposal of lands two years hence, although some may be negotiated today for use in the future, is difficult.

However, we believe that in the absence of another World War, a financial collapse similar to the Thirties, and a catastrophe of super proportion, during the first two years at least 30% of the lands should be contracted for either sale or lease and another 10% each year thereafter.

During this intervening period it will be found that some, who have acquired lands, will find a need for more lands which may accelerate the absorption of the entire area.

Porter, Armstrong, Ripa & Associates, 1965

We are enthusiastic about the opportunities this project can provide for the growth and betterment of the Newark area. We believe the methods outlined will convert a generally blighted, discouraging area into an industrial complex that will be a credit to the City, both economically and esthetically.

Arthur D. Little, Inc., 1965

Based upon the results of this study we believe that the Industrial River Urban Renewal Project offers a significant attraction as a location for the industries which are listed in Table 1. In addition, we believe that there will be a number of other so-called "footloose" industries (see Appendix C) that will seek sites within the Project. The Project area's central location within the Regional Transportation Network will be a powerful magnet to these "footloose" industries so long as land and construction costs are reasonably competitive.

Strouse, Greenberg and Co., 1971

The New Jersey Department of Labor and Industry lists twenty-one major groups of manufacturing industries operating within the metropolitan region. This list includes industries involved in the creation of chemicals, machinery, rubber products, furniture, textiles, wood and steel products, paper products, etc.

It is our opinion that the Newark Housing Authority should not restrict itself to one or five target industries, but should attempt to lure any or all of the twenty-one groups to the Project since we believe that as long as all the requirements and objectives of the Urban Renewal Plan are met, any non-compatibility which might arise will be minimal.

Further, it is our opinion that if the area is merchandised properly and subject to the aforementioned absorption rate, the developers who represent the twenty-one industries mentioned will be reasonably available to enter into development programs in the Industrial River Project.

C. IMPLICATIONS

None of the foregoing statements can be classified as "wildly optimistic." Each consultant was cautious to point out the numerous constraints to development in the R-121 Project, especially the very high costs associated with the bad underlying soil conditions.

Nevertheless, in the 12 intervening years since the first report cited above, the only significant development in the area has been the attraction of Ideal Toy. It is reasonable to ask, "If the location is such a fine one, why hasn't anything more substantial happened there?"

One important clue to the answers is contained in the 1965 report of Porter, Armstrong, Ripa & Associates. They go on to point out:

The lack of any substantial development is proof that some of the basic ingredients of the real estate development process, whether political, economic, or technical in nature, were and still are missing. And so the history of the Meadowlands of northern New Jersey has been one of apathy, frustration, and failure.

Another clue lies in an evaluation of the follow-through actions by the City of Newark subsequent to Arthur D. Little's earlier report. Also in 1965, we itemized the principal locational advantages of the R-121 area and stated:

In order to exploit these advantages, we believe that the Housing Authority should be particularly concerned with Newark's image as a location for industry. To this end we recommend that:

- (1) In order to maximize the benefits of the urban renewal program, every effort should be made to demonstrate that the environment of the Project Area can be made physically useful and attractive through good planning, landscape design, a high level of municipal services, and effective land use controls.

- (2) The city should demonstrate its desire to encourage industry in Newark by concentrating on the needs of those firms already operating within the City. More particularly, the Housing Authority should work closely and sympathetically with the existing firms in and adjacent to the Project Area during the planning and implementing of this urban renewal program.
- (3) In order to reduce uncertainty among existing occupants, every effort should be made to complete the Project as promptly as possible.

IV. REGIONAL SETTING

As illustrated in Figure 1, the R-121 project is located in a portion of New Jersey's Meadowlands, once called by Fortune Magazine "..... the most valuable piece of undeveloped real estate in the world."⁽¹⁾ The Meadowlands occupy a prime location in proximity and accessibility not only to the New York metropolitan area, but the entire northeastern United States.

New Jersey enjoys an unparalleled transportation network, with extensive highway, rail, air and water port facilities. There is a large, experienced and readily accessible work force available, and New Jersey is represented by almost every industry and service occupation found in the United States.

The New York metropolitan area of which Newark is an integral part, other nearby cities, and the surrounding suburban areas provide a large, lucrative market for all types of goods and services. Education, cultural, recreation, and entertainment opportunities are abundant.

Given these locational attributes, it is little wonder that the New Jersey Meadowlands have long been considered a prime asset with first-class real estate potential. It follows that the 1500-acre, R-121 site would be similarly considered. However, with a few significant exceptions, neither in the Meadowlands as a whole nor in R-121 has any significant activity occurred. In this report, we will explore the reasons why and suggest what actions the City of Newark can undertake to enhance development of R-121.

⁽¹⁾ Fortune Magazine, May, 1963

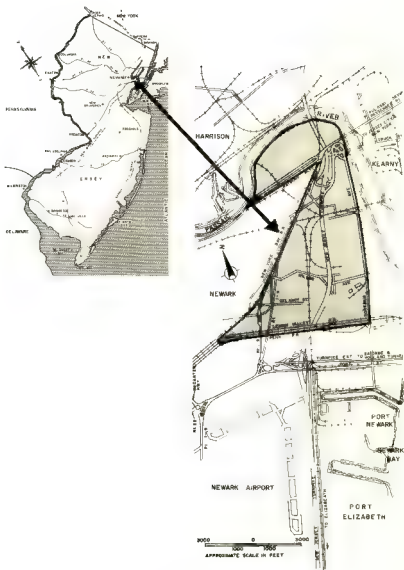


FIGURE 1
LOCATION OF R-121

V. NEARBY INDUSTRIAL DEVELOPMENTS

A. INTRODUCTION

Northern New Jersey is characterized as one of the oldest and most heavily developed regions in the United States. Because of its central location in the East Coast's megalopolis and the proximity to New York City, the area has long been an attraction for industry (light and heavy manufacturing) and commercial activities dependent upon the fine transportation network.

Nevertheless, despite the long history of development, and in part due to the economic slump of recent years, there is still plenty of prime industrial property available. Within minutes of both New York City and Newark are the following industrial parks or developments:

- Oakland, Bergen County
- Urban Wayne, Passaic County
- West Essex, West Caldwell
- East Rutherford, Rutherford
- Lyndhurst, Bergen County
- Free Zone, Secaucus
- Liberty, Jersey City
- Port Jersey, Bayonne
- Port Newark
- Port Elizabeth

Each of these was visited and discussed with knowledgeable representatives of developers, tenant companies and public officials. The reason for obtaining information on these developments were:

1. to gain insight into what others' experience could be applied to R-121; and
2. to assess R-121's regional competition for attracting industrial and commercial developers and tenant companies.

Each of these developments has much in common with R-121 in terms of locational attributes, transportation access and, in many cases, poor underlying soil conditions for construction (i.e., wetlands). While there are some differences, the development experience of the Lyndhurst Corporate Center (Bellemead Development Corporation) and Hartz Mountain Industries are examples of what could occur in R-121. Together with the newly completed New Jersey Sports Complex, these constitute the keys to the progress to date of the Hackensack Meadowlands Development.

B. HACKENSACK MEADOWLANDS

The Hackensack Meadowland Development Commission (HMDC) was created in 1969 by the New Jersey Legislature. The Hackensack Meadowlands encompasses some 20,000 acres of marsh, waterway, tidal basin and landfill. It is located in Bergen and Hudson Counties running from Jersey City on the south to Little Ferry on the north and the land is located in fourteen different municipalities. By master planning and zoning, the Hackensack Meadowlands are divided into parts that have already been clearly designated by past use. A ring of light industrial and distribution parks with landfills and railyards at the periphery of the marshlands was planned.

Since the time of HMDC's creation, more than \$150 million for new buildings and for the expansion of established firms has been pumped into the district's economy. It is claimed that this investment has resulted in more than 11,600 new employment opportunities and thousands of additional construction jobs. The two major developers in the district to date, are Bellemead Development Corporation and Hartz Mountain Industries. Hartz Mountain's 728 acre tract includes a 260-acre residential area and a 200-bed hospital. Bellemead's Lyndhurst Corporate Center is an office and industrial park which has attracted such blue chip companies as IHM, Phelps Dodge, United Artists, Corn Products, Armour, and Pepsi Cola.

In addition, the catalyst for much of the recent influx of development capital has been the New Jersey Sports Complex. The new race track and stadium opened in the fall of 1976. These sports complexes are an attraction for the industrial commercial developers who are looking at the Meadowlands district as a place to locate.

According to William T. McDowell, Executive Director of HMDC, a prospective builder can deal with the Meadowland Commission and know quickly whether his plans fit into the requirements of the area, and if not, what changes have to be made. The rules and regulations have all been made and will not change them in mid-project and cause expensive resurveys and studies which could deter developers to come into the area. Another significant aspect of the Hackensack Meadowlands is a solid waste management plan adopted in 1972 which calls for the eventual closing of the landfill operations in the district and the creation of bailers, resource recovery systems, and other disposable methods that are compatible with sound ecological planning. The plans for these now inactive landfills call for the creation of active recreation areas such as golf courses, tennis courts, baseball fields, bike paths, and nature study areas.

According to McDowell, "The Meadowlands will continue to work to fulfill those mandates charged to it by the New Jersey Legislature. The Commission and its staff will continue to seek the best methods for government, industry, and the people of the two counties and the fourteen towns to work together for the best interest of all concerned. One major point has been proven: government can work to protect the environmental interest of a region and still help industry make money while sharing a decent quality of life for the residents. The Meadowlands district is the only area in the country that can make that claim."

C. IMPLICATIONS FOR R-121

The findings resulting from the visits to ten industrial parks and an analysis of the Hackensack Meadowlands are valuable to the R-121 situation because they show (a) what the competition is and (b) what Newark could accomplish in R-121. The significant conclusions:

1. There is currently no shortage of good land suitable for industrial and commercial development surrounding Newark (i.e., within 10 miles).
2. Prime industrial land in these developments is currently selling for between \$20,000 and \$50,000 an acre (i.e., land with utilities and suitable for construction without high preparation costs).
3. While much of the land is more suitable for development than is R-121's, the Hackensack Meadowlands' experience can be emulated in Newark.
4. Newark's R-121 does have an added advantage of some tax concessions under the Fox-Lance urban renewal provisions.

With regard to the Hackensack Meadowlands, it has been suggested that Newark's R-121 be included within that district. This is a possibility which might have some distinct advantages for enhancing the future development of R-121. These are some rather severe problems with accomplishing such an objective. For one thing, Newark's Meadowlands, formed by the Passaic River and Newark Bay, are not contiguous with the Hackensack Meadowlands; for another, political problems of Newark's joining the 14 other municipalities represented by the HMDC.

Nevertheless, if it is deemed politically feasible and otherwise desirable, Newark should explore the possibility of joining with the HMDC.

VI. CONSTRAINTS TO DEVELOPMENT

A. GENERAL

Newark's R-121 currently cannot be regarded as "prime industrial property." Many of its deficiencies can be corrected or at least ameliorated so that it can be transformed into desirable real estate. However, one should be realistic in assessing the problems facing the future successful development of R-121.

It is not necessary here to belabor or elaborate upon the deficiencies, but they should be at least mentioned. First, the economic climate for industrial development and expansion has been poor in recent years; at the depth of the recession, New Jersey's unemployment reached 14%, one of the nation's highest rates, and Newark's was probably close to 20%.

Second, despite its locational advantages, R-121 is gravely deficient physically as potential industrial land compared to many other sites in the New York metropolitan area.

Third, R-121's location within Newark makes it subject to the "image problems" which have perennially haunted the City. The abatement of these problems in the near future does not seem likely, and any development of the R-121 area will have to take place within this context.

Other specific factors which bear upon the future development of R-121 include the riparian status, water and air resources, and solid waste disposal.

B. RIPARIAN STATUS

According to New Jersey Law (NISA 13:1B - 13.2 et seq.), all lands now or formerly flowed by the tides belong to the State until the State sells, leases, or otherwise conveys them to other persons. The monetary proceeds from such transfers of "riparian rights" are dedicated to the State School Fund. Prior to 1970, transfers of riparian rights took place on an ad hoc, piecemeal basis. However, in recent years, the State acting through the Department of Environmental Protection has adopted a stronger policy based on the following guidelines:

- (1) Limiting development of areas where tidal flow persists, particularly "virgin" wetlands characterized by estuarine marsh vegetation.
- (2) Establishing and obtaining a much higher "fair market value" for the lease or sale of the riparian rights to altered (e.g., filled) tidelands than obtained in transactions prior to 1970.

These guidelines will influence the latter of development time table of land in the Industrial River Project redevelopment area.

BETTER SOIL-CONDITION AREAS

In all but the areas shown,
severe cost penalties will
be incurred to permit new
construction.

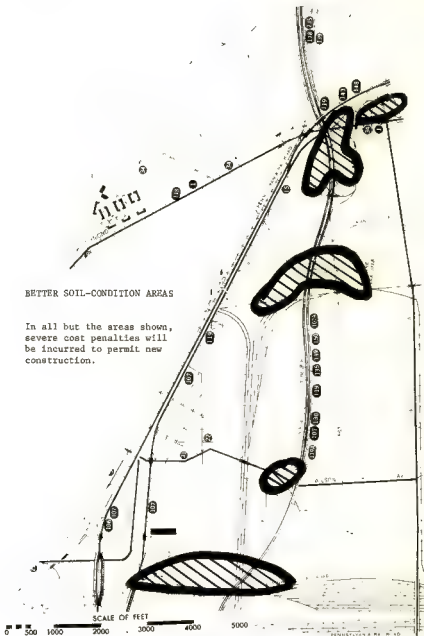


FIGURE 3

Following prolonged litigation, the State has recently finalized the official map delineating its claim to riparian lands in the Newark-Elizabeth Meadowlands, which includes the redevelopment project area. A comparison of this map with existing land use in the project area reveals that the development of virgin wetlands will not be an important issue. The tidal creek headwaters which once penetrated the area have been virtually eliminated by development. However, the question of the State's claim to the "fair market value" of the riparian rights to the former tidelands remains.

The Redevelopment and Housing Authority is seeking to save prospective redevelopers the cost and inconvenience of negotiating with the State by placing the burden for acquiring riparian rights upon the present land owners. There appears to be considerable potential for disagreement and delay in these negotiations, creating consequent potential for delays in redevelopment. Confrontations over the State's asking price are likely; and administrative procedures may prove lengthy (as has sometimes occurred in the recent past).

On a percentage basis, relatively little (perhaps 10%) of the industrial River Project acreage could be classified riparian. However, this acreage is scattered throughout many of the parcels along the northern, eastern, and southern portions of the area. The implication is that several redevelopment efforts could be affected; and that a means to expedite the acquisition of these riparian rights would be desirable.

C. WATER RESOURCES

Process and domestic wastewater from redevelopment users of the project site would probably be collected and treated at the nearby facilities of the Passaic Valley Sewage Commission (PVSC). We do not know what type (if any) of pretreatment of industrial process wastewater might be required; but have no reason to believe that such requirements would be unusually restrictive. This would depend in large measure upon the design of the advanced treatment facilities which would eventually be incorporated into (or replace) the PVSC's 250 million gallon/day primary treatment plant in Newark.

Runoff from the redevelopment area would probably continue to be directed to the Passaic River (to the north) or Newark Bay (to the east). Water quality in both these receiving bodies is poor. Undoubtedly, so is the current quality of runoff from the redevelopment area, particularly in light of the large volumes of refuse present. We know of no plans to require stormwater treatment in this area. If redevelopment projects include some proportion of vegetated open space, runoff contamination from the area would probably be no worse (and perhaps somewhat better) than it is at present.

D. AIR RESOURCES

Air quality in the project area is poor. In 1971, the levels of two principal pollutants, particulates and sulfur dioxide (SO_2) were higher at the Newark monitoring station than in any other part of the State.¹ Levels of photochemical oxidants are also high. Of these pollutants, particulates and oxidants appear likely to remain problems, while SO_2 does not. The State has proposed that Essex County, including the Industrial River Project Area, be designated an Air Quality Maintenance Area (AQMA) for particulates and oxidants. With such designation, it is possible that stricter attention might be paid to the air quality implications of industrial redevelopment than would occur in "cleaner" areas. These developers would face a similar designation with respect to oxidants anywhere in northeastern New Jersey; and in all northeastern countries except Passaic and Morris with respect to particulates.

E. SOLID WASTE DISPOSAL

Northeastern New Jersey as a whole faces severe solid waste disposal problems. Newark's problem is not unique. The landfill space it uses at present is too small to meet future needs, and has pollution potential. Two particular solid waste related problems could arise in connection with redevelopment efforts. First, problems could be encountered in finding suitable sites for the redispersion of any large amount of the existing refuse in the southeastern portion of the area. Second, it might also be difficult to find suitable sites for the disposal of any unusual chemical wastes from redevelopment industries. The second problem is somewhat hypothetical, inasmuch as legislation regulating such activities is still pending at both the Federal and State levels. If such legislation were passed, it would be difficult without further study to prejudge whether or not industries in the project area would be at any competitive disadvantage.

VII. ENGINEERING AND COST CONSIDERATIONS

A. ENGINEERING STUDIES

An earlier reference in this report suggested that the New Jersey Meadowlands had been studied perhaps more than any other similar real estate tract in the country. The R-121 project shares this distinction. In recent years, significant engineering work on R-121 has been carried out by the following firms:

Porter, Armstrong, Ripa & Associates,
Newark, 1965

Geo-Tech Associates, Fanwood,
N.J., 1974

Genge Community Consultants,
Wallingford, Conn., 1975

Barton-Aschman Associates,
Washington, D.C. 1976 and

Law Engineering Testing Company,
McLean Va., 1976

The reports of these firms deal variously with two basic problems inherent in the area: the extremely unfavorable conditions for construction and the lack of improvements required for potential occupants.

To overcome the poor soil conditions, various techniques have been investigated. These include one or a combination of soil stabilization methods such as complete excavation and refill, reconstitution and backfill, partial excavation and backfill, graving, and piling.

The consensus of the several reports is that (1) light construction lands can be supported via removing compressible materials (natural and man-made, i.e. refuse) and replacing with borrow or fill, and (2) heavier loads (e.g., for heavy manufacturing) will require piling.

The improvements required to bring the R-121 area up to standards conducive to attract development include the following:

Streets--extensive relocating, rebuilding, resurfacing,
widening and new construction;

Storm Drain--virtually lacking for normal runoff and
flooding;

Sanitary Sewer--need trunk lines and lateral capacity,
treatment plant nearby will have capacity

Water Distribution--some upgrading required;

Utilities--electric power, gas and telephone service

B. DEVELOPMENT COSTS

The question of the cost of converting the R-121 project from its present dismal state to one which will attract industrial and other development has prevailed for many years. Porter, Armstrong, Ripa & Associates, in 1965, estimated \$14.5 million for improved infrastructure (i.e., streets, sewers, water, etc.) plus about \$1 million for reimbursable improvements to the gas, telephone and electrical systems. Barton-Ascherman Associates, in 1976, estimated costs in the neighborhood of \$25 million for about the same project improvements. Such an escalation from about \$15 million to \$25 million, would be in line with the inflation in the construction industry in the intervening years. Neither estimate, incidentally, includes improvements to the accessibility to the area from the highways and the rest of Newark, nor the rebuilding of the Doremus Avenue Bridge (currently underway).

Thus, the project costs in 1976 for bringing R-121 up to modern standards would be about \$30 million, exclusive of piling individual sites.

The total costs for piling or other soil stabilization methods would depend upon a large number of variables. These include, in addition to the technique selected, factors such as the area within R-121, the type of construction, the load (i.e., weight) of the building and its contents, the area the building covers and a host of others. Nevertheless, a figure of \$5. per square foot of building coverage is a reasonable average for all, but the poorest soil conditions.

Thus, a fair estimate for planning purposes is \$45 million to pile the some 400 acres under the Authority's control.(1)

(1) 400 acres X 43,560 Sq. Ft. X 50% building coverage X \$5./Sq. Ft.

VIII. R-121 LAND VALUES

A. PAST APPRAISALS

In the previous section we have presented data from several engineering studies which shows the high cost of preparing the R-121 area for industrial development. Once the cost of land is determined, one needs to know what its value is.

Over the years, numerous studies of R-121 have been made with the objective of establishing a value for the property. In every case, it has been assumed that the highest-and-best-use of the land is for industry. Attempts have been made to differentiate between the value "as if" and the resulting value "as is", that is, what the value would be to a developer or industrial user if the infrastructure improvements were made and the bad soil conditions were corrected.

In 1964, one appraiser estimated the "as if" value of between \$20,000 and \$50,000 an acre.⁽¹⁾ A later appraisal, in 1971, established an average value of the 400 acres controlled by the NHA of \$9-14,000 an acre in its present state and \$39,000 an acre if it were prepared for construction, or "buildable."⁽²⁾ A recent, 1975 estimate of the "value as though stabilized" was that the value could approximate roughly \$80,000 an acre range.⁽³⁾

Thus, it is reasonable to conclude that qualified appraisers would concur that land within the R-121 Project would be worth \$50,000 to \$80,000 today, if it were properly prepared for construction (i.e., stabilized) and if the necessary infrastructure improvements were made (i.e., roads, sewers and utilities).

B. COMPETITIVE INDUSTRIAL VALUES

There is currently no shortage of good land suitable for industrial development in the area surrounding Newark (i.e., within a 10-mile radius). As noted in the Introduction Section of this report, ADL representatives

⁽¹⁾ Louis Schlesinger Company, Newark

⁽²⁾ Strouse, Greenberg and Co., Philadelphia

⁽³⁾ Op. Cit.

visited ten industrial parks in the region and obtained pertinent information.

Depending upon the location, state of development, development costs and a number of other factors, prime industrial land in these parks is selling for between \$20,000 and \$50,000 an acre. In a few selected cases, especially where a small parcel in a highly desirable location is involved, a sale might be made for as much as \$100,000 an acre or even more.

C. CURRENT AND FUTURE VALUES

In addition to evaluating past appraisals and visiting industrial parks, ADL interviewed over a dozen knowledgeable realtors in the Newark area. These interviews verified the information and conclusions obtained from other sources.

Namely, land closer to the Newark International Airport prepared for construction, and with good accessibility and infrastructure would sell for \$200,000 an acre. Good industrial land in the region, with locational advantages equal to R-121's, can be acquired for \$50,000 or less per acre.

Regarding future values, the outlook for industrial real estate in the Newark area is cloudy. However, even if R-121 were converted to a prime industrial area, and even with the availability of Fox-Lance tax advantages, it is unlikely that land values would climb much above today's levels for the region.

IX. CANDIDATE INDUSTRIES AND SITE REQUIREMENTS

A. INDUSTRY SCREENING

As an approach to identifying industries which would be likely candidates for locating in Newark on the R-121 property, ADL went through a process of screening 400 industries for their location requirements and industry characteristics. The industries represented all four-digit sectors listed in the U.S. Department of Commerce Standard Industrial Classification System (SIC). The screening procedure was developed by ADL analysts who assigned various requirements and industry characteristics (listed in Table 12) to appropriate industries.

For purposes of screening industries appropriate for locating in Newark on the R-121 property, the following selected characteristics and requirements were considered:

Location Requirements

Transportation
Distribution
Permissive Legislation

Industry Characteristics

Labor Intensive
Urban Orientation
Semi-skilled Labor
Inexpensive Labor
Regional Market

Considering these characteristics and requirements, we concentrated on labor-intensive industries that might require good transportation and distribution, which might need permissive legislation, and which required an urban orientation. Results show that top industries of this nature include:

Prepared Meat Products
Cellulosic Man-Made Fibers
Gum and Wood Chemicals
Rubber Footware
Non-Metallic Mineral Products
Secondary Smelting, Refining and Alloying of Non-Ferrous
Metals and Alloys
Steel Springs

Other industries which are also possibilities include:

Meat Packing Plants
Poultry and Small Game Dressing and Packing

Nailed and Lock Corner Wooden Boxes
Wirebound Boxes and Crates
Cooperage

Reclaimed Rubber
Fabricated Rubber Products

Vitreous China Plumbing Fixtures
Porcelain Electrical Supplies
Steam and Other Packing, Pipe and Boiler Covering

Gray Iron Foundries
Malleable Iron Foundries
Steel Foundries
Aluminum Castings
Brass, Bronze, Copper, Copper Base Alloy Castings
Nonferrous Castings

Fabricated Structural Steel
Architectural and Miscellaneous Metal Work
Screw Machine Products
Miscellaneous Fabricated Wire Products
Safes and Vaults

Refrigerators, Refrigeration Machinery, Except Household

Welding Apparatus
Radio and TV Transmitting
Radiographic X-Ray, Etc.

Truck and Bus Bodies
Truck Trailers
Boat Building and Repairing
Motorcycles, Bicycles and Parts
Trailer Coaches
Transportation Equipment

Games and Toys
Dolls
Childrens Vehicles Except Bicycles
Sporting and Athletic Goods
Costume Jewelry and Novelties
Feathers, Plumes and Artificial Flowers
Buttons
Needles, Pins, Hooks and Eyes, and Similar Notions
Signs and Advertising Displays
Umbrellas, Parasols, and Canes

TABLE 12

POSSIBLE INDUSTRY CHARACTERISTICS

<u>Location Requirements</u>	<u>Industry Characteristics</u>
Raw Materials	Labor Intensive
Industrial Market	Capital Intensive
Consumer Market	Economies of Scale
Highly Skilled Labor	Special Product
Other Labor	Standard Product
Transportation	Intermediate Product
Distribution	Final Product
Power	Forward Link--Locates Near Consumers
Fuel	Backward Link--Locates Near Suppliers
Water	Concentration Dependence--Cost Savings
Site	Near Own Industry
Permissive Legislation	Urban Orientation--Cost Savings Near
	Industry in General
	Professional Labor
	Skilled Labor
	Semi-Skilled Labor
	Secondary Labor--Female
	Cheap Labor
	Transport Cost Low Relative to Value
	of Product
	Local Market
	Regional Market
	National Market

A similar analysis of the industries which might be attracted to Newark was carried out in the earlier 1965 ADL study. The results of that analysis, which are still pertinent today, are contained in the Appendix to this report.

B. SITE AND BUILDING REQUIREMENTS

As a general rule in the R-121 area, it will be desirable to locate industries having heavy floor-loading requirements in the areas where the subsoil conditions are the best, and those with less severe requirements in the poorer areas. This would suggest a relatively light manufacturing or assembly operation(s) for the site where the live load might be in the order of 150-200 pounds per square foot.

A good alternative to a light manufacturing operation is one where the land requirements are rather large but the structural requirements are less. That is, operations similar to some of the chemical and petrochemical ones which are already located in the R-121 area need a lot of land but cover only a relatively small proportion of that land with tanks, process operations, buildings, etc. While structures such as storage tanks do require heavy support foundations, they often fill less of the land than would a building of a manufacturing plant. The production (say, in sales value) per unit (e.g., square foot) of land requiring soil stabilization could be considerably greater than a manufacturing building placed on the same amount of acreage.

For illustrative planning purposes, let us assume a particular 13-acre site⁽¹⁾ is divided equally between the two operations discussed above; one is a relatively labor intensive manufacturing assembly operation and the other is a chemical processing operation. These two hypothetical operations are shown in the appendix. For comparison purposes, a warehousing operation is also shown. The manufacturing one would result in the following:

Soil stabilization costs	\$ 600,000
Construction costs	2,800,000
Annual payroll	5,200,000
Annual taxes (payments for services under Fox-Lance, 2% of construction costs)	56,000

(1) The site studied by Genge Community Consultants, Inc., in 1975, parcels 103A-1, 103A-2 and 103-1A.

Similar calculations for a processing or chemical operation might look like the following:

Soil stabilization	\$ 200,000
Construction costs	1,400,000
Annual payroll	1,040,000
Annual taxes (as above)	28,000

For a warehousing operation similar to Ideal Toys:

Soil stabilization	\$ 600,000
Construction costs	2,100,000
Annual payroll	2,700,000
Annual taxes	42,000

A very rough analysis of the relative costs vs. benefits of soil stabilization costs only and tax revenues only might look like the following:

	<u>Stabilization Costs</u>	<u>Tax Revenues</u>	<u>Recovery (years)</u>
Manufacturing	\$600,000	\$56,000	10.7
Processing	200,000	28,000	7.1
Warehousing	600,000	42,000	14.3

Albeit crude, this exercise suggests that under certain assumptions (which seem not unrealistic) associated with soil stabilization can be measured against direct revenues accruing to the City. Of course, in the hypothetical examples used, the payroll is significantly better in the manufacturing one, and the indirect benefits resulting might justify the extra stabilization costs.

The basic assumptions underlying these analyses are contained in the Appendix.

X. PROPOSED ACTION

A. INTRODUCTION

The original objective of this current ADL study was "to devise an overall marketing program" for R-121. However, as noted in the introduction to this report and stressed throughout, we concluded that it is premature to embark upon a "marketing program." In order to have a product to market, there are a number of fundamental things which the City of Newark must first undertake with regard to R-121.

Thus, the following recommendations are grouped into two divisions. In the first are things which ought to be done in the immediate future. The second grouping includes marketing actions which can be undertaken after the initial efforts have progressed to where NRHA has a marketable product in R-121.

B. IMMEDIATE ACTIONS

In our opinion, the critical first step is to create at least the appearance of a marketable product in R-121. This means that Newark must undertake a clean-up program there. At present, R-121 is an eyesore which shows little or no evidence to an outsider that Newark is serious about attracting reputable industrial or commercial firms there.

While it is highly desirable that the entire area be "dressed up," efforts can begin in those parts which are likely to hold the most promise of near-term development. These are the sites immediately nearby Ideal Toy and the drive-in theatre area west of the turnpike.

Closely related to the appearance aspect is the need for Newark to begin to enforce codes and other regulations, the violation of which is further evidence of a "no care" attitude on the City's part.

Similarly, an extensive program should be undertaken to improve the infrastructure in the R-121 area. Again, the entire area needs considerable improvement, but efforts can begin in those portions which are the more viable ones. Paved roads, curbs, grading and improved water and sewer service are not only evidence that Newark cares, but are absolutely essential items to a prospective developer or tenant company. Furthermore, they are an inherent City responsibility.

Implicit in the foregoing is the requirement that all the City's departments and agencies make a strong commitment, followed by explicit action, to upgrade R-121. This means a working together of the Mayor's Office and the City departments, NRHA, and NEDC.

Concurrently, the NRHA should line up the funding sources for site

preparation. It is difficult at the present time to anticipate what public funds will be available in the future, but the most likely Federal sources are EDA, EPA and HUD, in addition to the State EDA. It is not necessary to expend site preparation funds over a wide area in anticipation of prospective purchasers. However, it is critical that NRHA have the flexibility to do so where the requirement arises and, most importantly, to do so expeditiously when a prospect appears on the scene.

C. FUTURE ACTIONS

When these fundamental steps are taken to develop R-121 into a marketable product, action will be justified (i.e., worth undertaking) on a program to market the area. Specific steps which we suggest:

1. Alert local realtors to the fact that the City is serious about carrying out its responsibilities in fostering development in R-121. Furthermore, assure local realtors that commissions will be protected and paid at the time of sales.
2. Similarly, alert the business community (especially the banks and other lending institutions) that action is going to take place in R-121. This can be done through press releases, speeches at businessmen's meetings, brochure mailings and media articles.
3. Contact local industrial and commercial companies who already are located in or near Newark and who might be considering expansion and/or relocating to a new facility. This can be done through visits, letters and other personal contacts, and should stress the tax and other advantages of a location in R-121.
4. Concentrate mailings and personal contacts with companies not currently in Newark to those candidate industries for whom R-121 has particular locational advantages. These are listed in Section XI.
5. Utilize the conventional industrial development promotion and marketing tools which are well-known by NEDC, PSE&G and the State economic development agencies. Examples:

- a. distribution and showing of the new promotional movie on Newark;
- b. placement of ads in periodicals;
- c. brochure mailings;
- d. directional signs and billboards;
- e. offers to finance and "build to suit," etc.;
- f. time on radio and TV "talk shows";
- g. periodic contacts with plant location consultants;
- h. organized tours to view development progress; and
- i. industrial development conferences.

Lastly, NRHA and NEDC should maintain close and constant contact with those agencies which will continue to have a significant influence over economic development in Northern New Jersey. Especially important are the New Jersey Economic Development Authority, the Public Service Electric & Gas Company, and the Port Authority of New York & New Jersey. Discussions with representatives of these agencies indicated a recognition of the future potential of R-121. But, it is clear that they will watch closely to see if the City of Newark will act in order to capitalize on this potential.

APPENDIX

APPENDIX A

The following illustrate the underlying assumptions to the analysis of the site and building requirements discussed in Section X, Candidate Industries and Site Requirements.

MANUFACTURING FACILITY

1. 1/2 of site or about 280,000 Sq. Ft. or 6.5A's
2. 2:1 land/buildings ratios-plant of 140,000 Sq. Ft.
3. Single-story 150-200 Sq. Ft. live load columns on 40' centers
18' ceiling height.
4. Light assembly operations.
5. Construction \$20/Sq. Ft. or \$2.8 million.
6. Soil stabilization: \$600,000 (60% of \$1.02 million estimate).
7. Labor @ 250/Employee = 560 employees @ avg. \$4.50/yr = \$5.2 million
annual payroll.
8. Taxes under Fox-Lance: 2% X construction cost or \$56,000 annually.

PROCESSING OR CHEMICAL OPERATION

1. 6.5 A site
2. 10:1 land/building (facilities) ratio
3. Tanks, process equipment, pipes, rail siding, etc.
4. 28,000 Sq. Ft. land coverage
5. Construction cost: 28,000 @ \$50 = \$1,400,000
6. Soil stabilization 28,000
7. Labor 100 @ \$5/hr. = \$1,040,000
8. Fox-Lance taxes @ 2% = \$28,000

WAREHOUSE FACILITY (SIMILAR TO IDEAL TOY)

1. 1/2 of site or about 280,000
2. 2:1 land: buildings ratio- plant: = 140,000
3. Single-story
700# live load
Col'son 40'
20' ceiling height
4. Warehouse Operation
5. Construction: \$15 or \$2.1 million (lesser building)
6. Soil stabilization: \$600,000
7. Labor @ 400/employee = 350 employees
8. Taxes: 2% on construction = \$42,000

$$\text{Recovery: } \frac{\$600,000}{42,000} = 14.3 \text{ yrs.}$$



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